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(12) **United States Design Patent**
Duffek et al.

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(54) **ENGINE EXHAUST TREATMENT DEVICE HOUSING**

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(**) Term: **14 Years**

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Related U.S. Application Data

(62) Division of application No. 29/301,554, filed on Mar. 6, 2008, now Pat. No. Des. 590,419.

(51) **LOC (9) Cl.** **15-01**

(52) **U.S. Cl.** **D15/5**

(58) **Field of Classification Search** D15/1,
D15/3, 5; 55/337; 123/41.67, 198 E; 418/91;
60/299, 274, 324; 23/288 F

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,420,052	A	1/1969	Miller	
3,607,133	A	9/1971	Hirao et al.	
3,852,042	A	12/1974	Wagner	
6,712,869	B2	3/2004	Cheng et al.	
6,767,378	B2	7/2004	Nishiyama et al.	
6,824,743	B1	11/2004	Pawson et al.	
6,887,294	B2	5/2005	Kanematsu	
7,062,904	B1	6/2006	Hu et al.	
7,299,626	B2	11/2007	Barasa et al.	
D590,419	S *	4/2009	Duffek et al.	D15/5
2005/0150211	A1	7/2005	Crawley et al.	

2006/0277900	A1	12/2006	Hovda et al.
2007/0039316	A1	2/2007	Bosanee, Jr. et al.
2007/0137187	A1	6/2007	Kumar
2008/0072580	A1	3/2008	Nagaoka et al.
2008/0155973	A1	7/2008	Maruyama et al.

OTHER PUBLICATIONS

Thiesel 2002 Conference on Thermo- and Fluid-Dynamic Processes in Diesel Engines, "An Integrated Approach for the Design of Diesel Engine Exhaust Systems to meeting Euro 4 and Beyond Emissions Legislations," pp. 1-15.

Photos of exhaust treatment arrangements displayed by a non-Caterpillar companies at the Mid-America Trucking Show on Mar. 22, 2007 in Louisville, Kentucky (2 sheets).

* cited by examiner

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(57) **CLAIM**

The ornamental design for an engine exhaust treatment device housing, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an engine exhaust treatment device housing of our design;

FIG. 2 is a right side view thereof;

FIG. 3 is a top view thereof;

FIG. 4 is a front view thereof;

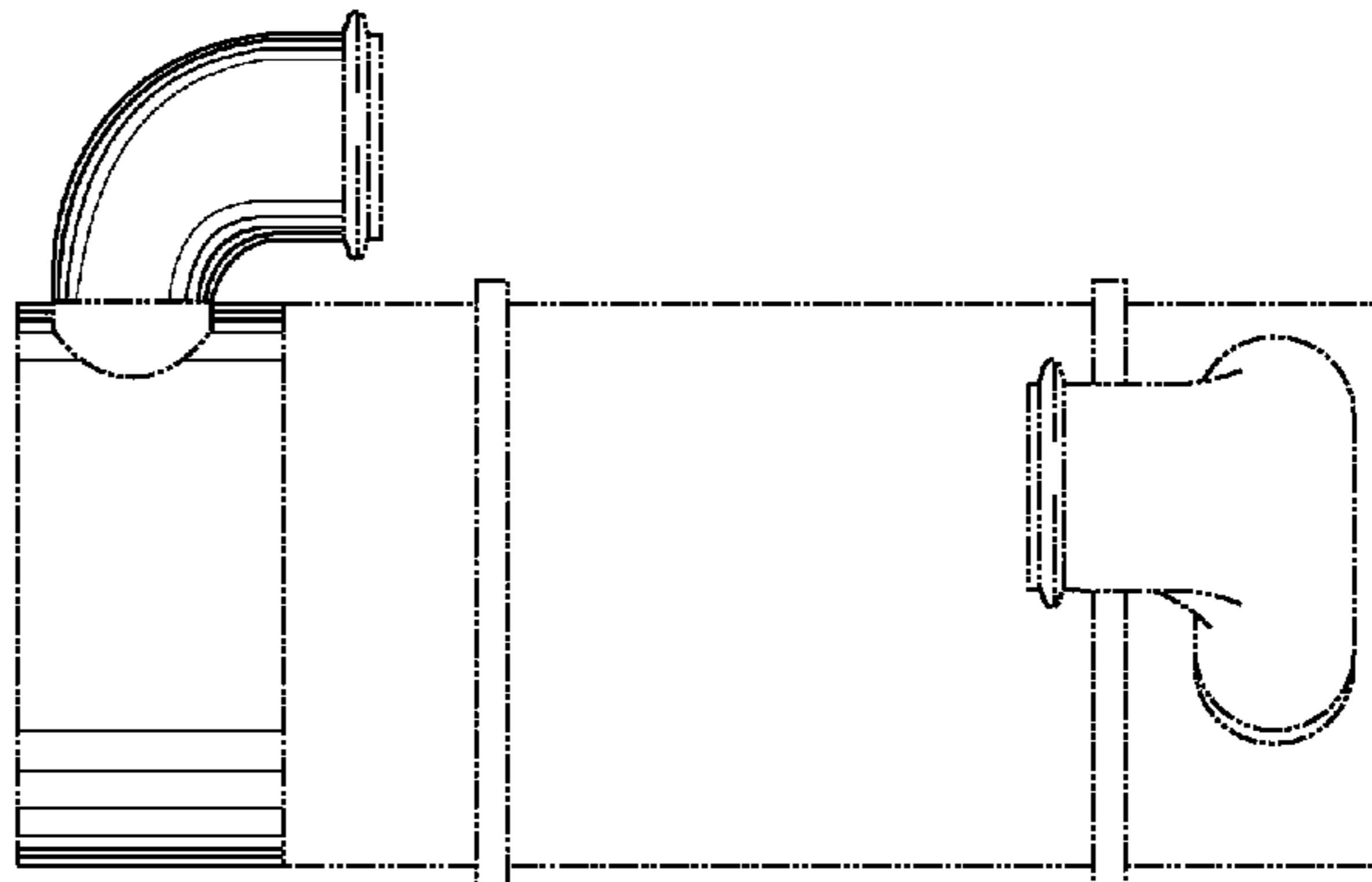
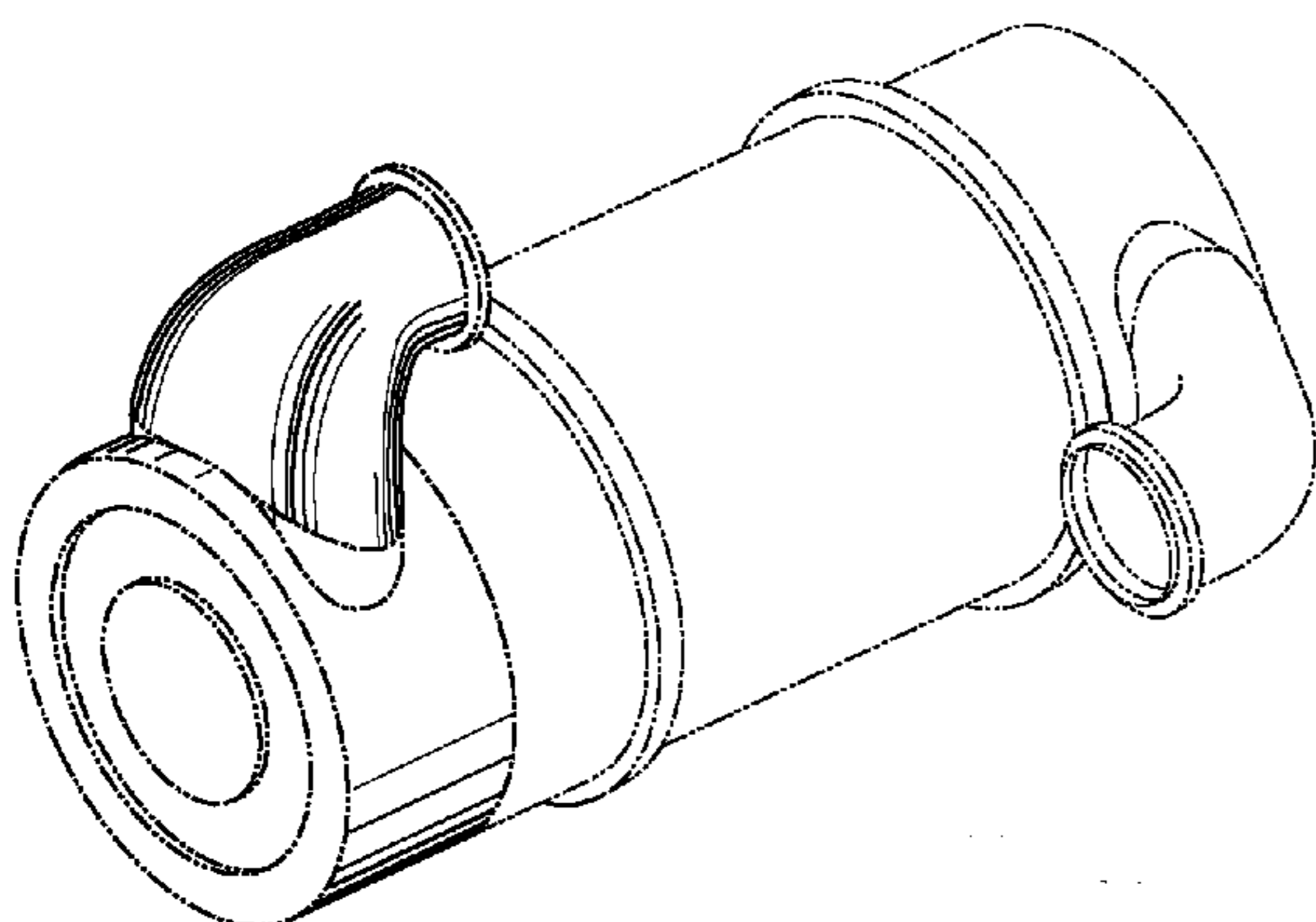
FIG. 5 is a left side view thereof;

FIG. 6 is a bottom view thereof; and,

FIG. 7 is a rear view thereof.

The broken line showing of a portion of an engine exhaust treatment device housing is included for the purpose of illustrating environmental structure and forms no part of the claimed design.

1 Claim, 7 Drawing Sheets



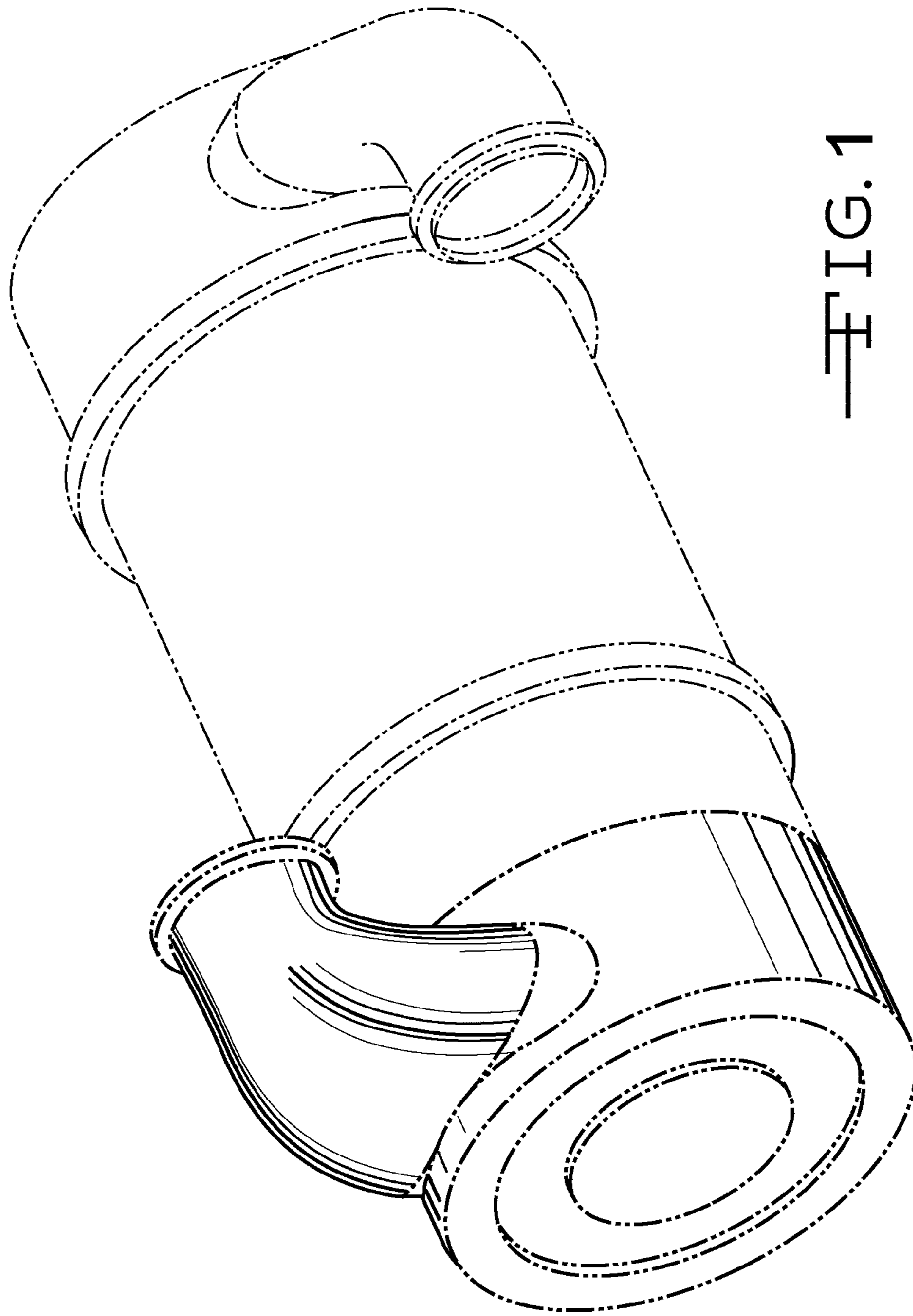


FIG. 1

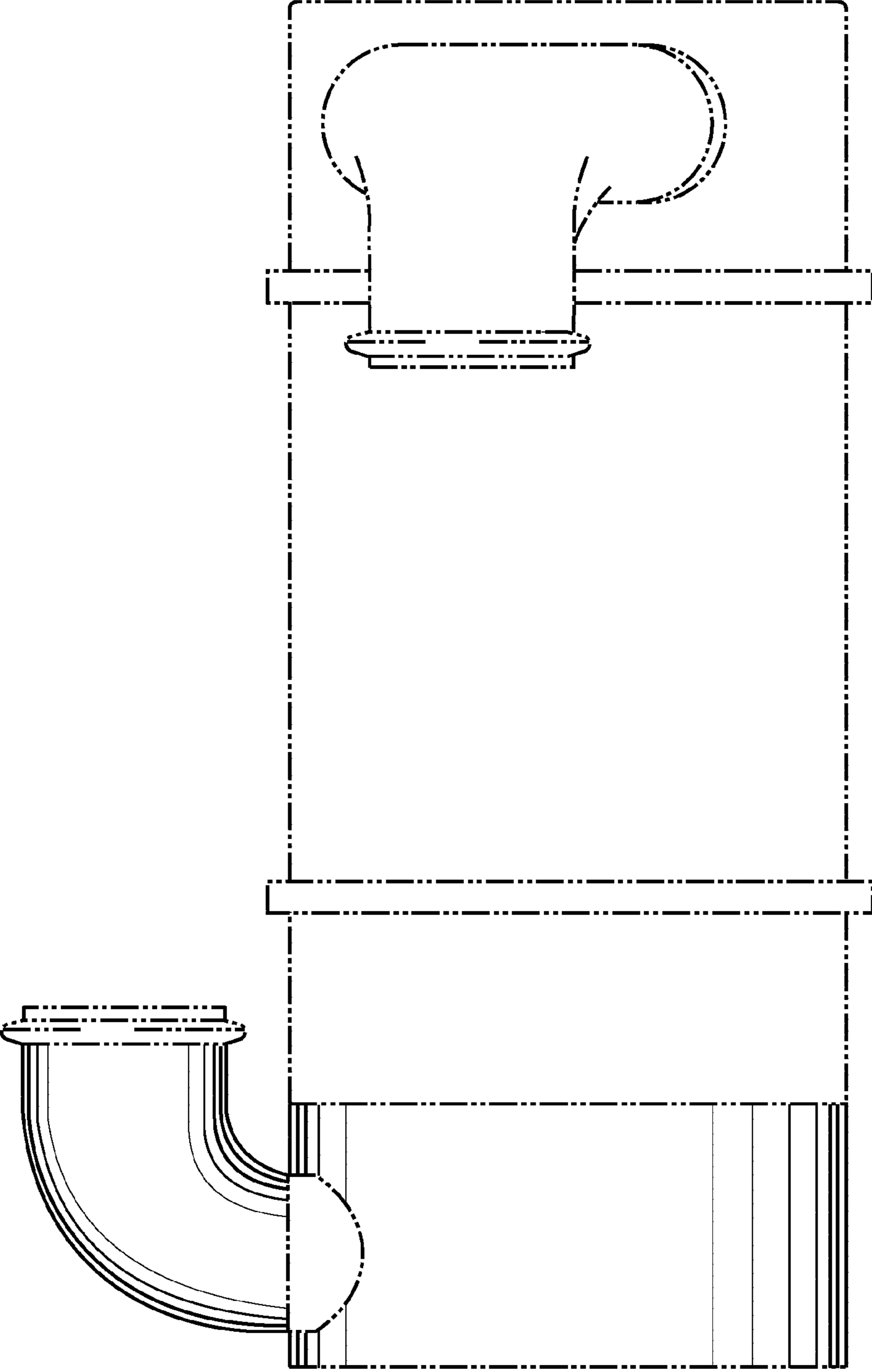


FIG. 2

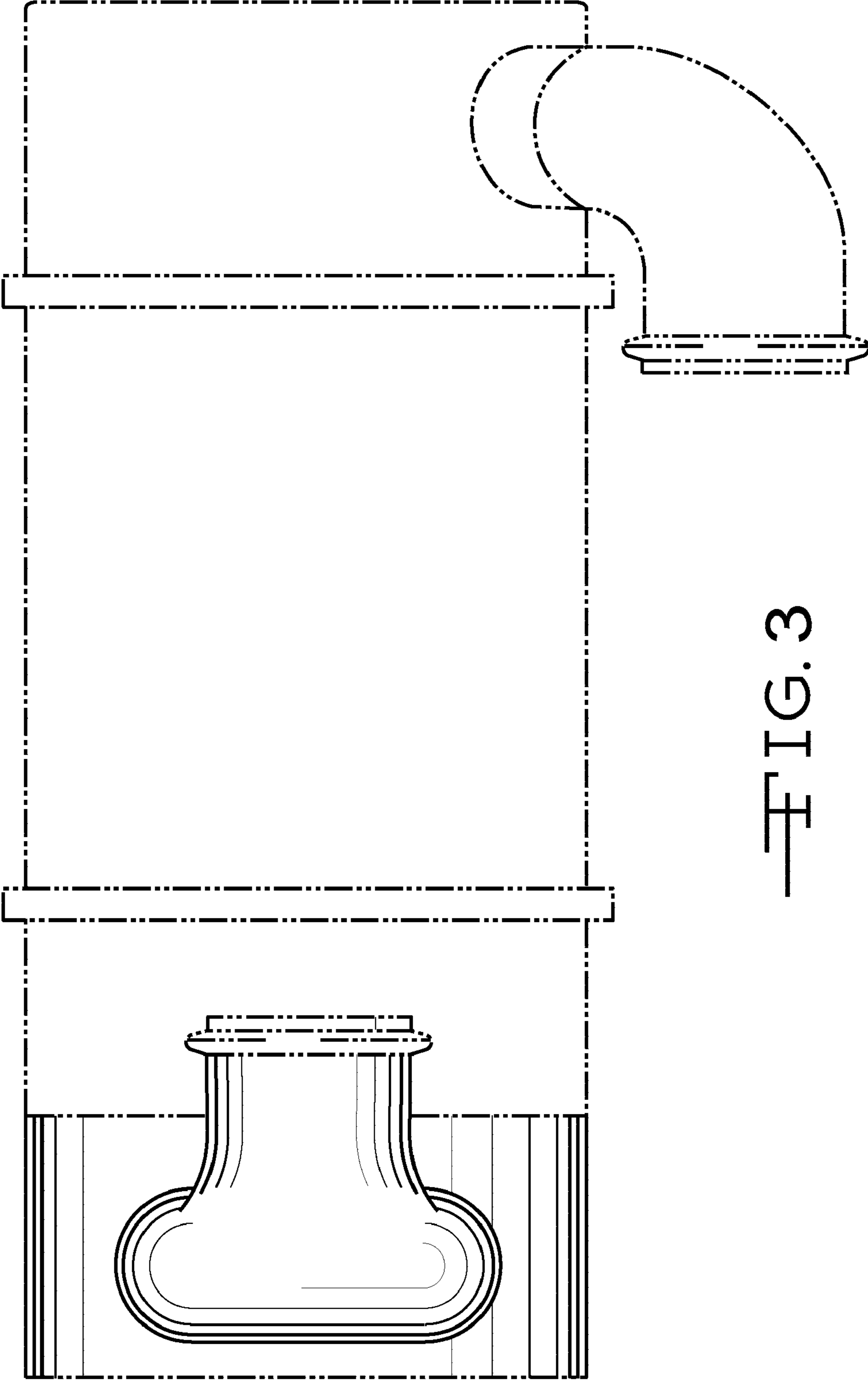


FIG. 3

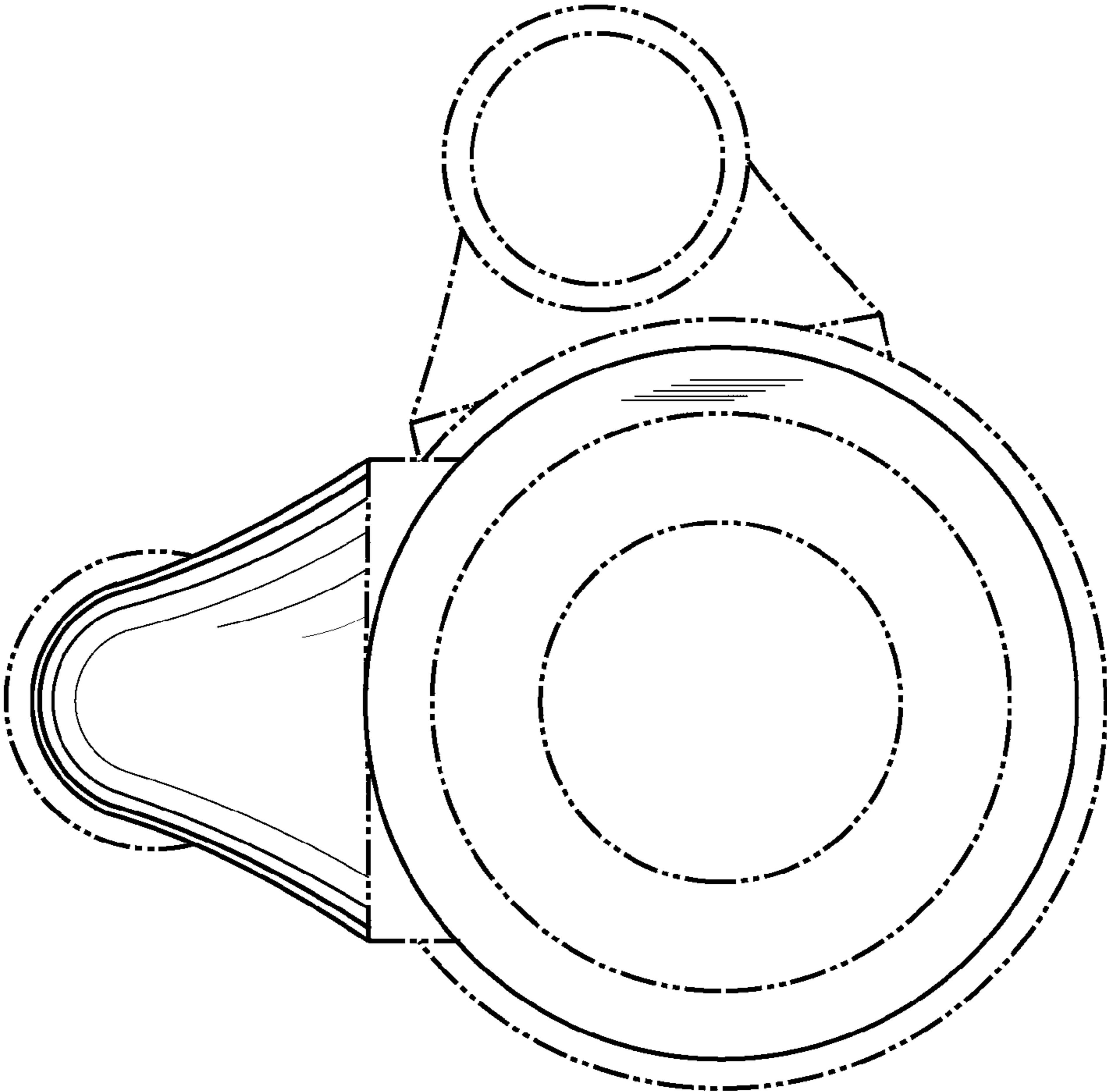


FIG. 4

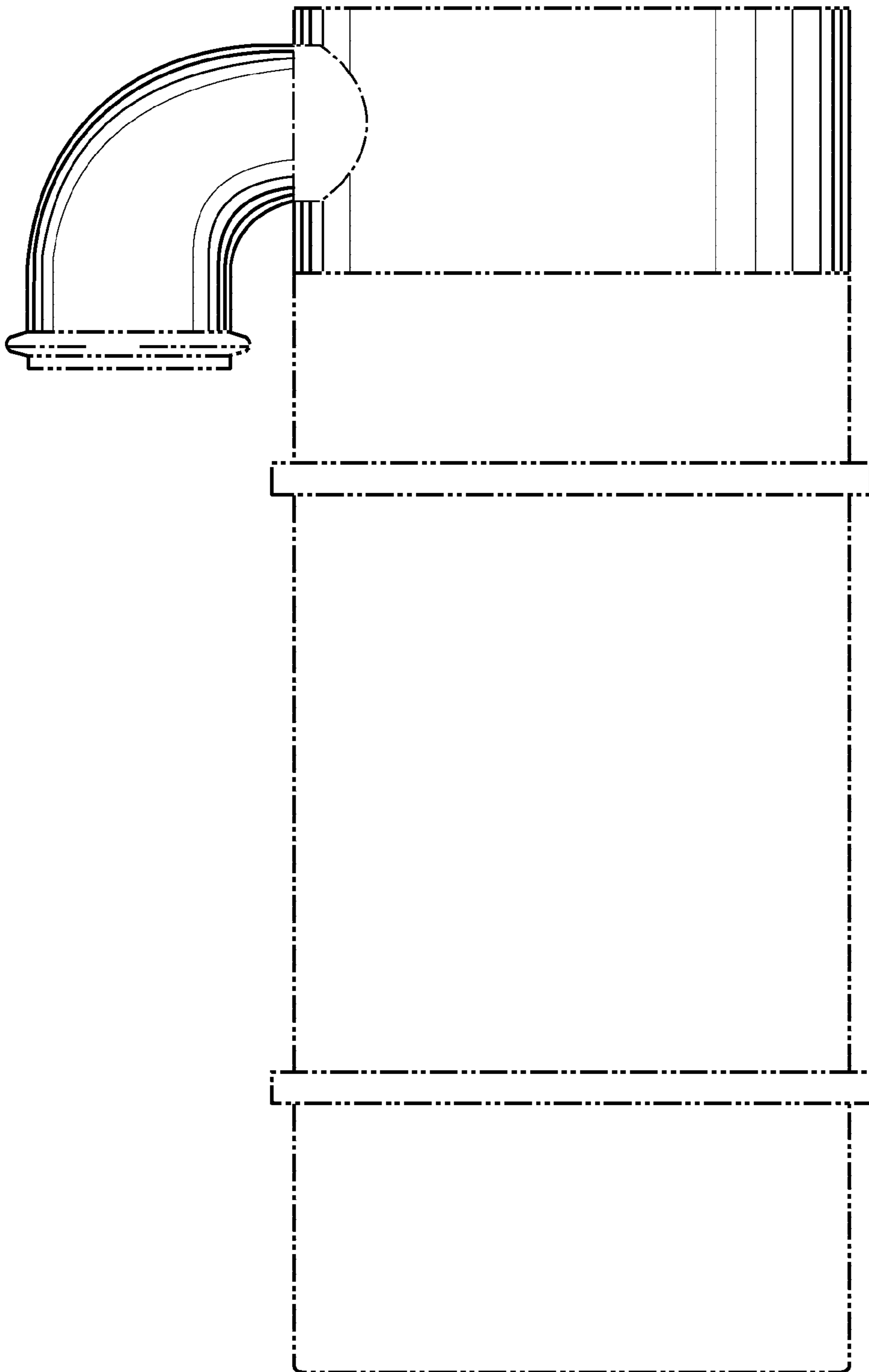


FIG. 5

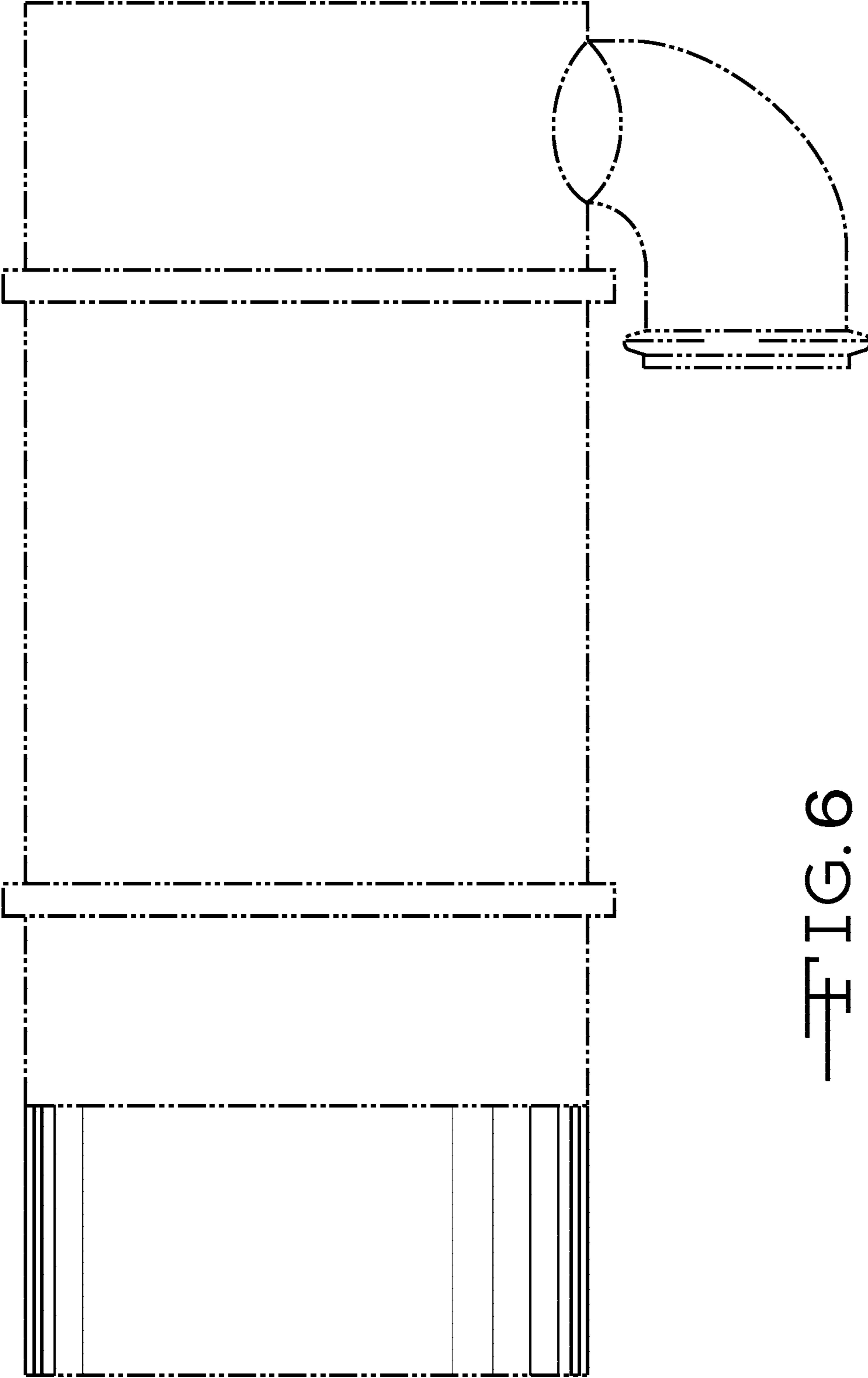


FIG. 6

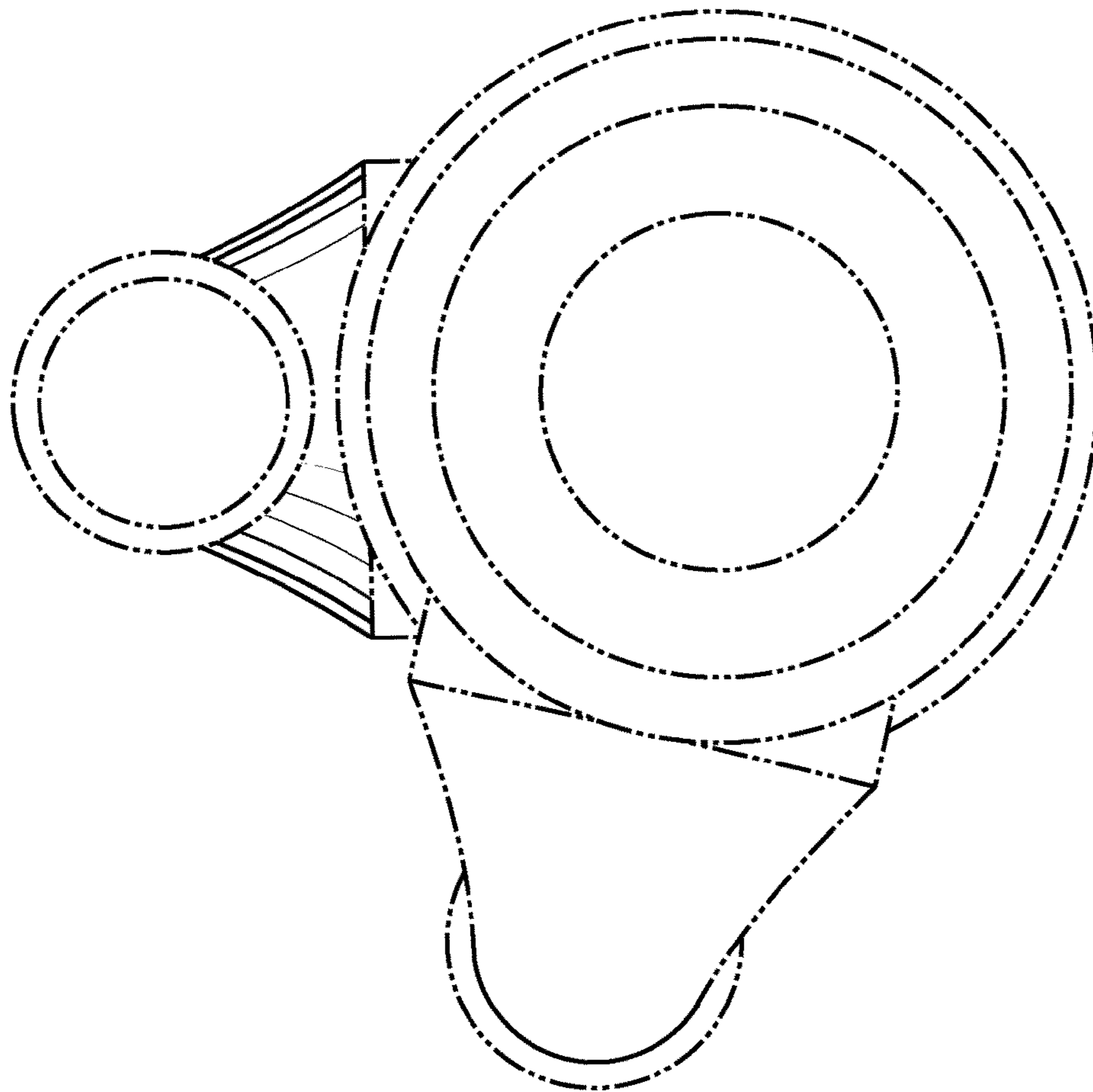


FIG. 7